

Application No. 10/795,830
Amendment dated March 28, 2007
Reply to Office Action dated November 30, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (previously presented): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum comprises means for establishing one or more datums relative to the surgical site selected from the list consisting of pins, screws, bars, fins, rails, dovetails, planar surfaces, holes, slots, and/or notches.

Claim 3 (previously presented): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum comprises means for establishing an intermediate datum separate from the guide itself.

Claim 4 (previously presented): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum comprises a guide body including a plurality of holes through the body for guiding the placement of pins relative to the surgical site.

Claim 5 (withdrawn): The navigated orthopaedic guide of claim 4 wherein the guide body comprises a body having a planar surface engageable with a distal cut surface of a femur and the plurality of holes includes a common hole and a plurality of size specific holes, each of the size specific holes corresponding to a different size of subsequent surgical component such that placement of a pin through the common hole and one of the size specific holes results in a two pin datum engageable by a specific size of subsequent surgical component.

Application No. 10/795,830
Amendment dated March 28, 2007
Reply to Office Action dated November 30, 2006

Claim 6 (withdrawn): The navigated orthopaedic guide of claim 4 wherein the guide body comprises a body having a planar surface engageable with a distal cut surface of a femur and the plurality of holes includes a plurality of central holes and each central hole has associated with it a plurality of size specific holes, each of the size specific holes corresponding to a different size of subsequent surgical component such that placement of a pin through one of the central holes and one of the corresponding size specific holes results in a two pin datum engageable by a specific size of subsequent surgical component.

Claim 7 (withdrawn): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum comprises a body having a planar reference surface for engaging a distal femoral surface of a femur during knee replacement surgery, the body having a width approximately one-half the medial-lateral width of the distal femoral surface, the body having at least one hole for guiding a pin into engagement with the approximate center of the distal femoral surface and at least one other hole for guiding a pin into engagement with the distal femoral surface to establish a datum comprising at least two pins engageable by a femoral finishing cut guide.

Claim 8 (previously presented): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum includes a base member and a datum guide member connected to the base member such that the position of the datum guide member is adjustable relative to the base member to a desired datum guide member position as indicated by the surgical navigation system.

Claim 9 (previously presented): The navigated orthopaedic guide of claim 8 wherein the base member is able to be secured to a distal portion of a femur and the datum guide member is adjustable relative to the base member to establish a datum having desired flexion-extension and varus-valgus angles as indicated by the surgical navigation system.

Application No. 10/795,830
Amendment dated March 28, 2007
Reply to Office Action dated November 30, 2006

Claim 10 (previously presented): The navigated orthopaedic guide of claim 8 wherein the base member is able to be secured to a proximal portion of a tibia and the datum guide member is adjustable relative to the base member to establish a datum having desired posterior slope and varus-valgus angles as indicated by the surgical navigation system.

Claim 11 (previously presented): The navigated orthopaedic guide of claim 15 wherein the means for establishing a datum comprises a base member defining a first adjustment axis, a connecting link mounted for rotation about and translation along the first adjustment axis, the connecting link defining a second adjustment axis, and a guide member mounted for rotation about and translation perpendicular to the second guide axis.

Claim 12 (previously presented): The navigated orthopaedic guide of claim 11 further comprising locking means for locking the connecting link relative to the first adjustment axis and the guide member relative to the second adjustment axis.

Claim 13 (previously presented): The navigated orthopaedic guide of claim 11 wherein the first adjustment axis is defined by a cylindrical bore formed transversely through an adjustment member, the connecting link including a cylindrical shaft engageable with the cylindrical bore for rotation within and translation along the cylindrical bore, the adjustment member being able to be pulled transversely relative to the first adjustment axis to clamp the cylindrical shaft in a locked position.

Claim 14 (previously presented): The navigated orthopaedic guide of claim 13 wherein the connecting link includes a tab having a cylindrical bore defining the second adjustment axis, the guide member having a yoke surrounding the tab and a pivot extending through the bore of the tab and the yoke, the yoke being rotatable about the second adjustment axis and the yoke including an elongated slot permitting it to translate perpendicular to the axis, the yoke including a locking mechanism for compressing the yoke into engagement with the tab to lock the yoke in

Application No. 10/795,830
Amendment dated March 28, 2007
Reply to Office Action dated November 30, 2006

position relative to the tab.

Claim 15 (previously presented): A surgical system for use during an orthopaedic surgical procedure at a surgical site of a patient's body, the system comprising:

a surgical navigation system including means for tracking the position of an object during a surgical procedure;

a navigated orthopaedic guide including means for being tracked by the surgical navigation system to guide positioning of the orthopaedic guide at a desired position relative to the surgical site, the orthopaedic guide including means for establishing a datum at a desired position relative to the surgical site; and

a surgical component including means for engaging the datum positioned by the orthopaedic guide to locate the surgical component at a desired position relative to the surgical site.

Claim 16 (previously presented): The system of claim 15 wherein the means for tracking comprises multiple sensors to detect and triangulate the position of the orthopaedic guide.

Claim 17 (previously presented): The system of claim 15 wherein the means for being tracked comprises an electromagnetic coil attached to the orthopaedic guide, the electromagnetic coil producing a signal detectable by the means for tracking.

Claim 18 (previously presented): The system of claim 15 wherein the means for establishing a datum comprises a drill guide to guide a drill in forming a hole in a bone at the surgical site.

Claim 19 (previously presented): The system of claim 15 wherein the means for establishing a datum comprises at least one hole in the orthopaedic guide to guide placement of a pin adjacent the surgical site.

Application No. 10/795,830
Amendment dated March 28, 2007
Reply to Office Action dated November 30, 2006

Claim 20 (withdrawn): The system of claim 15 wherein the surgical component comprises an implant for replacing a portion of a bone.

Claim 21 (previously presented): The system of claim 15 wherein the surgical component comprises a cut guide to guide a cutter to cut a bone to receive an implant.

Claim 22 (withdrawn): The system of claim 21 wherein the cut guide comprises a femoral finishing guide including guides for guiding a saw blade to shape the end of a femoral bone to receive a femoral knee implant.

Claim 23 (previously presented): The system of claim 21 wherein the cut guide comprises a distal femoral cut guide.

Claim 24 (withdrawn): The system of claim 21 wherein the cut guide comprises a proximal tibial cut guide.

Claim 25 (previously presented): The system of claim 15 wherein the means for engaging the datum comprises at least one hole formed in the surgical component to receive the datum in the form of a pin.

Claim 26 (withdrawn): The system of claim 15 wherein the means for establishing a datum directly engages the subsequent surgical component.

Claims 27-41 (canceled)